

ABSTRACT

A sequence of code symbols is supplied to a rate decision block. The sequence of code symbols can be output from a Viterbi decoder, and may correspond to block encoded and convolutional encoded output from a vocoder, produced in data frames at varying data rates, or frame rates, unknown to the decoder or to the rate decision block. The rate decision block determines a number of frame energies based on the sequence of code symbols, where each frame energy corresponds to a tentative frame rate. Each frame energy can be determined, by measuring the power and duration of each code symbol based on the tentative frame rate, to determine the tentative energy of each code symbol in a frame, and then adding the tentative energies of all the code symbols in the frame. The rate decision block determines a final frame rate when the frame energies meets a desired condition.